

Micromachined Pyro-optical Structure

Abstract of the Disclosure

This invention is a micromachined sensor pixel structure that can be fabricated either as discrete sensors or in array form with application to thermal sensing of radiation received from various wavelength emitters. The transmissivity of thermally-isolated microplatforms is a sensitivitive function of temperature. This transmissivity is modulated by incident radiation from sources including infrared sources. The transmissivity of a micromachined structure is interrogated by means of an optical carrier and readout by means of conventional silicon optical sensors or imagers.